

DETAILED ACTION

1. This communication is in response to Application No. 10/552,393, filed 10/07/2005, claims 1-9 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being obvious over Xie et al. (US 2004/0068586) in view of Fremantle et al. (2005/0278417).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the

Art Unit: 4117

application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

4. Regarding claim 1, Xie discloses a method/system as shown on Fig. 1 for a web services gateway (e.g. web service broker 104) to enable a web client (e.g. client applications 102b) to access a web service (106a) (abstract), the method comprising the steps of:

receiving a profile from the web service, the profile containing a details (e.g. 212, 214, 216) of how to communicate with the web service (paragraph 0035) and being in a format not recognizable (e.g. usable) to the web client (paragraph 0030 & 0066);

creating a document (e.g. WSDL description) based on the profile (0035, 0044), the document containing details of how to communicate (e.g. invoke) with the web service via the gateway (paragraph 0027, and e.g. details 212, 214 and 216 on paragraph 0057); and

providing (loading) to a third party (e.g. UDDI registry by an affiliated party), information relating to the web service (i.e. description of a particular web service, paragraph 0044), and

However, Xie does not explicitly disclose where the document is in a format recognizable to the web client nor where a third party provides information related to the

web service, particularly including a location from which the document can be obtained by the web client.

Fremantle teaches web service gateway or web service server to provide a modified document based on the document profile, such as a WSDL, describing a target service to a requesting client which contains details which have been tailored for that client (see abstract). Providing to a third party (e.g. UDDI directory) which publishes information related to the web service (see paragraph 0003) where the client obtains a location (e.g. URL) from which said document can be obtained by the web client (see paragraph 0003), particularly where said document based on the profile has been modified in a form accessible by the client (see paragraph 0036).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made given by the teachings of Xie and Fremantle before them, to modify Xie teachings to include that the client or application uses the document such as WSDL to access web services taught by Fremantle. One would be motivated to combine these teachings because these documents that are provided by the gateway describes details how to access the web services which is specified with the clients request.

5. Regarding claim 2, Xie-Fremantle discloses a method according to claim 1, as described above, comprising the further steps of:

using the details of the document to match the request with the profile (i.e. transformation information) received from the web service (Xie paragraph 0046, e.g. service mapping);

using details from the profile to convert the request to a request suitable for sending to the web service (Xie paragraph 0027); and

sending the converted request to the web service (i.e. broker can convert the request from the application to the web services, paragraph 0076).

However, Xie does not disclose receiving a request from the web client for the web service, the request including details of the document.

Fremantle discloses a request from the web client for the web service, the request including details of the document (paragraph 0006).

6. Regarding claim 3, Xie-Fremantle discloses wherein the details of how to communicate with the web service via the gateway include a location in the gateway for the client to use when requesting to access the web service (Xie paragraph 0065), the location being associated with the profile and the method further comprises the steps of:

receiving a request, at the location (401) in the gateway (400) for the client to use when requesting to access the web service from the web client for the web service (Fremantle, paragraph 0034);

obtaining details from the profile associated with the location and using the details to convert the request into a request suitable for sending to the web service (Xie paragraph 0027); and

sending the converted request to the web service (i.e. broker can convert the request from the application to the web services, Xie paragraph 0076).

7. Regarding claim 4, Xie-Fremantle discloses waiting for a response (i.e. in response to receiving the request) to the converted request from the web service; and using the response to the converted request to trigger a response to the web client request (Xie paragraph 0073-0074)

8. Regarding claim 5, Xie-Fremantle discloses a method for a web services gateway (e.g. web service broker) to enable a web client (e.g. client applications) to access a web service (Xie abstract, Fig. 1), the gateway comprising:

means for (e.g. broker) receiving a profile from the web service (e.g. 212, 214, 216), the profile containing a details of how to communicate with the web service (Xie paragraph 0035) and being in a format not recognizable to the web client (Xie paragraph 0030 and 0066);

means for (e.g. broker) creating a document (e.g. WSDL) based on the profile (i.e. profile can also include other information, such as user names and password with reference to a WSDL, Xie paragraph 0057), the document being in a format recognizable to the web client and containing details of how to communicate (e.g. invoke) with the web service via the gateway (Xie paragraph 0027, and e.g. details 212, 214, and 216 on paragraph 0057); and

means for (UDDI) providing (loading), to a third party, information relating to the web service (i.e. reference of an WSDL description of a particular web service), and a location from which the document can be obtained by the web client (Xie paragraph 0044, 0057);

However, Xie does not explicitly disclose thereby enabling the web client to use the document to access the web service via the web service gateway.

Fremantle discloses thereby enabling the web client to use the document (e.g. requesting by the client to use the WSDL document) to access the web service (e.g. target service) via the web service gateway (abstract).

9. Regarding claim 6, this claim comprises the method for web client communicating with the web service via the gateway which is substantially the same steps discussed in claim 2, there by rationale of rejection is applicable.

10. Regarding claim 7, this claim comprises the method for communicating with the web service via the gateway which is substantially the same steps discussed in claim 3 above, there by rationale of rejection is applicable.

11. Regarding claim 8, this claim comprises the method for communicating with the web service via the gateway and using the response to the converted request to trigger a response to the web client request which is substantially the same steps discussed in claim 4, there by rationale of rejection is applicable.

12. Regarding claim 9, a computer program product comprising instructions which, when executed on a data processing host, cause the data processing host to carry out the method as claimed in claim 1 (paragraph 0062).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barak Nissan whose telephone number is (571)-270-3632. The examiner can normally be reached on Mon-Thurs 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beatriz Prieto can be reached on (571)-272-3902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B.N.
Patent Examiner

/Prieto B./
Supervisory Patent Examiner, Art Unit 4117